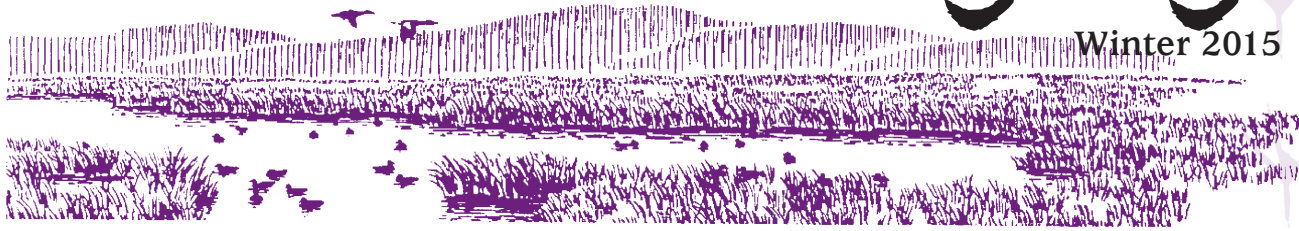


The Flyway

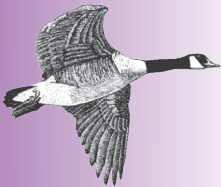
Winter 2015



Quarterly newsletter for Nisqually and Grays Harbor National Wildlife Refuges

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Save the Dates!

The Grays Harbor Shorebird and Nature Festival will be held May 6-8 in Hoquiam.

The Butcher Bird of Nisqually

By Michael Schramm

Keep alert—there are things to be seen. One who isn't paying attention will see birds, only birds, and might miss all the dramas unfolding in every direction. There is a part of each of us that likes to see nature in a golden light, passive and peaceful—geese with their ducklings, rabbits eating grass. But even the most gentle-natured person is likely to appreciate the hunter as well: the owls, the eagles, the falcons. These hunters are not so gentle, and it can be uncomfortable to contemplate the toll they exact. They create the drama, a fear and ubiquitous tension felt all across the delta by every other bird and creature, and when you really look you will see it too: a panic of thousands when an eagle flies over, or something much more surprising, more unexpected, and more subtle.

A gray songbird sits atop a barren winter bush, resembling a mockingbird or a jay. It is so still, many don't see it until it suddenly launches itself at a sharp angle toward the ground and into the tall grass, flashing black and white wings as it goes. This is a Northern Shrike, the butcher bird of Nisqually, and what it is about to do may, to the faint of heart, seem disturbing ...

The hunting habits of the Northern Shrike are legendary. Though it mostly eats insects, it also relies heavily upon ro-

dents and small birds. Since the Shrike is not a raptor, it does not kill with its talons but instead must rely upon a specialized beak. It is adapted to sever the spine of prey using a sharp, triangular projection

at the tip of the upper bill. Then, uniquely, the Shrike has a gruesome habit of impaling its prey on thorns, barbed wire, or whatever other sharp projection they might find. No other hunting bird exhibits this behavior. It is this habit which earned the Shrike its dramatic name, the butcher bird. But the Shrike is not a bloodthirsty maniac, killing in a wanton way as early observers assumed.

The behavior is practical. Like a squirrel gathering nuts, the Shrike is merely storing food for later.

Earlier this fall, a visiting first grade field trip was amazed and excited to watch a Shrike impale a vole on a blackberry vine just off the edge of the gravel access road. It was a trip highlight for everyone involved (excepting, of course, the vole). Had the class stuck around long enough, they might have watched the Shrike prepare or devour its prey. The butcher starts by creating a tear at the eyes or mouth, then peeling back the skin to the tail. The bird can then easily tear apart the prey piece by piece, devouring it or stashing pieces for later on other thorns, or nooks and crannies in trees. Since the Shrike spends winter in northern climes, where it is typically

Continued on page 2



Northern Shrike. Photo by Michael Schramm/USFWS

On the Wing

By Glynnis Nakai, *Refuge Manager*

Billy Frank Jr. touched a number of peoples' lives even beyond the boundaries of the Pacific Northwest. The first time I heard his name was in Hawai'i when he met with Senator Daniel Inouye (who has also passed on) to discuss Hawaiian cultural affairs and native Hawaiian recognition. Billy's dedication and passion to protect our natural resources for fisheries and his fight for native fishing rights is a story that is timeless and will continue to be told. His legendary accomplishments are memorialized in other forms. On November 24, 2015, Billy Frank Jr. was posthumously awarded the Presidential Medal of Freedom, the highest civilian honor, for his significant contributions to Native American treaty rights and fisheries protection. And, closer to home, in May 2015, U.S. Representative Denny Heck introduced into the House, a bill (H.R. 2270) to rename Nisqually National Wildlife Refuge to the 'Billy Frank Jr. Nisqually National Wildlife Refuge' and establish the Medicine Creek Treaty National Memorial to commemorate the historic signing of the Medicine Creek Treaty in



Photo courtesy Northwest Indian Fisheries Commission

1854. This bill recently passed in the House (November 30) and the Senate (December 14) with full support from Washington delegates, including Senator Maria Cantwell.

The boundary of the Medicine Creek Treaty National Memorial will be determined by the Secretary of the Interior, Sally Jewell, and management will be administered to the Nisqually NWR. The bill specifically identifies four treaty tribes' (Nisqually, Squaxin Island, Puyallup, and Muckleshoot Indian Tribes) representatives to collaborate with the Refuge on planning and designing the interpretation of the National Memorial. Although we cannot predict when this bill will be passed in D.C., we are starting to coordinate discussions with the Tribes. The Refuge plans to have a ceremony for the renaming of Nisqually NWR

and will coordinate a dedication to the Medicine Creek Treaty National Memorial with representatives from the designated tribes. Currently, the timeline and format is open for discussions with the Tribes with special consideration for the Nisqually Indian Tribe who is hosting the 2016 Tribal Canoe Journey. These journeys are an important cultural and spiritual event for Pacific Northwest Tribes as they paddle

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Save trees, think green.

To receive *The Flyway* electronically, email
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to the host site and spend a week sharing and celebrating their heritage. We look forward to collaborating with tribal representatives and pulling together this culturally significant designation.

As we close 2015, the Refuge staff extends warm wishes for a Happy Holiday with friends and family. ✧

Northern Shrike

From page 1

near or below freezing, the meat doesn't spoil fast and can be an invaluable safeguard against hunger.

Like all natural predators, the Northern Shrike benefits the greater ecosystem, ferreting out the weak, preventing overpopulation and disease. Whether or not one wants to pay this bigger picture any attention, the bottom line is that the Shrike is striking and fun to watch. Here at the Refuge, you can reliably see Shrikes October through March, darting about from one snag to the next in the grasslands or seasonal wetlands on either side of the gravel dike trail. A given bird returns to the same spot year after year. It's like seeing an old friend—the Butcher Bird of Nisqually. ✧

Refuge Education Program Reaches New Audiences

By Davy Clark

What happens when you bring a dead salmon into three kindergarten classrooms in all its stinky, slimy, smelly glory? After everyone has had a chance to scream, then the investigation begins. Peel back the gills and discover the wondrous way that fish can breathe under water. Wiggle the fins and notice how perfectly the fish is suited for swimming. Open the mouth and find a tongue lined with teeth.

This was the scene on November 2nd when we took our Environmental Education Program on the road to Boze Elementary in Tacoma. Boze teachers have been working with Shoshanna Chohen, an Instructional Specialist with the non-profit Technology Access Foundation (TAF). TAF's mission is to equip students of color for success in college and life through the power of a STEM (Science, Technology, Engineering, Math) Education. With Shoshanna's help, three kindergarten classrooms are working on a project to address a real-world problem.

The problem: Teachers ordering guppies to teach about aquatic life often find that their guppies arrive dead.

The Solution: These three kindergarten classes have committed to learning all about healthy ecosystems and how packages are shipped. They plan to make a video to send to the company distributing the guppies offering their suggestions on how to improve their shipping methods.



The refuge offered its support to this project by sending environmental educators into the classroom to explore the idea of a “healthy ecosystem” with the kindergarteners. Students rotated through stations to learn all about the parts of a salmon, its habitat, and the whole host of animals that depend on the salmon.

Through this project students are learning the building blocks to many STEM topics while also working on solving a real-world problem! Our hats are off to the young guppy heroes of Boze Elementary. ✎



Fun Facts

American Bull Frog—Because of their large legs and supreme jumping ability, they are used for frog racing in certain parts of the USA. They can leap up to six feet in distance!

Garter Snakes—They are one of the only serpents to give birth to live young, and they give birth to about eighty at a time.

North American Beaver—The largest beaver dam is 2,790 feet long. That's over half a mile! And it's visible from space!

Pacific Tree Frog—Males have a round vocal sac that, when calling, can balloon out to a size three times as large as his head.

Willows—City planners have to watch out for willow for, although quite slender, their roots are known for lifting sidewalks.

Duckweed—Researchers are currently genetically modifying duckweeds that can synthesize insulin and other commercially valuable medicines. In fact, there is an International Lemna Association (*Lemna* being the genus of duckweed), whose mission is, “to promote the development of commercially-viable markets for renewable and sustainable products derived from duckweed.”

Today's Students, Tomorrow's Scientists

by Susie Hayes

Who were those young students exploring the Refuge with clipboards and cardboard binoculars? Those budding scientists were North Thurston School District 1st graders from 13 schools, 51 classrooms total. Two years ago Heather Sisson, a science specialist from NTSD, contacted Nisqually National Wildlife Refuge Education Coordinators, Davy Clark and Danika Didur-Tate, about providing an outdoor learning experience for 1st grade. The District wanted to provide outdoor experiences as a foundation for their young students to grasp some of the new science standards. Teacher's attended a four hour workshop on the refuge on September 1st and 2nd to outline activities and an agenda while at the Refuge. The teachers then committed to a 3 ½ hour field trip choosing a day between September 22nd and October 8th window, with the Watershed Festival falling during that time. This was all before the teachers had even met their classes. That takes belief and dedication.

One theme for the field trips was scientists ask questions, use tools, and record data. Most teachers taught a lesson in the classroom, Animal Track and Sign, provided by the Refuge Education Coordinators and learned science specific vocabulary such as wildlife and observation. The Refuge education program focused all of its effort during this 2+ week window to creating an outdoor and indoor learning experience for 1,127 students, 319 chaperones, and 51 teachers. There were 13 field trip days bringing 75 to 125 students, with dedicated chaperones and teachers met by Davy, Danika, and many enthusiastic ed program volunteers. The students were split into two groups, alternating indoor workshops and an outdoor guided walk. Indoors, students participated in 2 workshops, The Power of Observation and Animal Adaptations. Outdoors, students took their scientific tools to find and record: a flock of birds and count how many, something of a certain color (students had different colors), and an animal sign.

"Look, this feather is a sword that flies", observed one student while studying feathers at an animal adaptation table.

While observing a flock of perhaps 200 geese overhead, another student exclaimed, "Look the geese are dancing." When another 50 or so geese flew in to join the big flock, he said, "And this is the music."

Every field trip ends with Davy or Danika asking what the kids saw and learned. One day when Danika asked a large group of 1st graders, "How much do you think it would cost for you to come back and visit the Refuge?" When she told them it was free, spontaneously the group jumped up, screamed a deafening, "Yeah!!!" all while jumping up and down for almost a minute.

No doubt their visit was an overwhelming success and the kids definitely wanted to come back.

The student's enthusiasm and creative quotes are evidence of kids connecting to the environment and seeing the Refuge and its wildlife through a child's eyes. Over the years the Refuge Education Program has continued to improve its outreach and outdoor program to schools and other groups. Davy has been able to facilitate his vision for a successful education program with the financial help of The Friends of Nisqually National Wildlife Refuge (giving 70-85 % of their budget year-

ly) and the dedicated hours of trained education program volunteers. These groups truly understand and value the importance of offering environmental education at such a special place as our Refuge. Today's students, tomorrow's scientists and stewards of our earth. ✨



Kid's Quotes

Upon being told the refuge is open when the sun is out, a 3rd grader raised his hand and asked, "Would a solar eclipse affect your business hours?"



During an Animal Adaptations activity examining different egg replicas Davy asked a 2nd grader, "What shape is this egg?"

The 2nd grader replied knowingly, "Oval, which comes from the Latin word, 'ovum', meaning egg."



A 3rd grade student wanted to share their expertise and request in a thank you letter.

"Dear Nisqually Staff,

I loved the field trip!

I even saw a frog camouflage in a branch. I know it was camouflaged because my group didn't see it.

But... I would really appreciate if the honey bucket was farther away from the habitats." ✨

New and Renewing Friends Memberships *Fall 2015*

Senior/Student (\$15)

Thomas G. Malone
Barbara E. Malone
Karen Drum
Larry & Becky Russell
Glenis Nielsen
Connie Nuse
Janice & Horace Thuline
Mark Rue
Steve Trapp
Miho Pell
D. J. Snyder
Fred Tobiason
Dorothy Tobiason
Melody Mayer
Gimi Bashaw

Individual (\$25)

Kay Lennartson
Nancy E. Henderson
Holly B. Smith

Shirlene Anderson
Sally Bennett
Mary T. Brasseaux
James Killingbeck
Len Elliott

Family (\$50)

Ralph Arnold
Karen Petersen
Susie Hayes & Paul Smith
Carol & Bill Langford
Jay M. Stene
Masaharu & Deborah Jones

Supporting (\$100)

Mary Goodsell
Clyde & Jane Shiner
Elizabeth Hanson
John Cusick & Christi McGinley
Tim & Linda Bates
Isabelle Bohman
Dave & Laura Nicol

Kristin & Michael Stewart
Bill & Carole Wieland
David & Kelley Ward
Karen Pauler
Ken & Nell Batker
Jack & Donna Rice

Partner (\$250)

Bert & Sandy Stevens
Carol L. Else

Friends of Nisqually NWR

is a 501(c)(3) nonprofit organization established in 1998 to promote conservation of the natural and cultural resources and fund educational and outreach programs at **Nisqually National Wildlife Refuge Complex.**

Join Friends of Nisqually NWRC!

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- ☐ Please send information on making Friends of Nisqually NWRC a beneficiary of my estate.
☐ Check here to receive an electronic version of *The Flyway* newsletter by email.

Individual/Family Memberships

- ☐ \$15 Student/Senior
☐ \$25 Individual
☐ \$50 Family
☐ \$100 Supporting
☐ \$250 Partner
☐ \$500 Patron
☐ \$1000 Benefactor

Corporate/Business Memberships

- ☐ \$250 Business Sponsor
☐ \$500 Community Partner
☐ \$1000 Sustaining Business
☐ \$2500 Corporate Patron
☐ \$5000 + Corporate Benefactor

Friends of Nisqually NWR is a 501(c)(3) nonprofit organization established in 1998 to promote conservation of the natural and cultural resources and fund educational and outreach programs at **Nisqually National Wildlife Refuge Complex.**

Please make checks payable to: Friends of Nisqually NWRC, 100 Brown Farm Rd, Olympia, WA 98516

Your tax deductible contribution will help preserve the unique habitats, fish, and wildlife of the Nisqually Delta and the Grays Harbor Tideflats.

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National Wildlife Refuge**

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Return Service Requested

**Planning a field trip to
Nisqually National Wildlife Refuge?**

Attend one of our free Field Trip Orientation Workshops to get all the tools you need to confidently guide your students on a meaningful outdoor learning experience. You will be introduced to our hands on indoor activities in our education center, hike the Twin Barns Loop Trail, and learn about one of the largest restoration projects in the Puget Sound! Refreshments will be provided.

Workshop Dates:

Saturday January 23rd 9am-1pm

Saturday February 20th 9am-1pm

Wednesday March 2nd 4pm-8pm

✱ Only teachers who have participated in a field trip orientation workshop within the past three years are able to schedule a class for their field trip between May 15 and the end of the school year. Teachers who have attended a workshop since 2011 and scheduled a field trip within the past two years may continue to schedule field trips between May 15th and the end of the school year without re-taking the workshop. ✱

Location: Education Center at Nisqually National Wildlife Refuge (From I-5 Take Exit 114 and follow signs)

Clock hours are available for a fee, approved by ESD113.

To Register: Download the registration form from our website fws.gov/refuge/Nisqually

Under the Visit tab select “For Educators” and then **Teacher Training.** ✱

For more information:

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